

ABSTRACT

The invention provides for capturing and displaying video images by (1) creating a video signal comprising a succession of video fields or frames containing optical image video data representing the captured optical image, with a plurality of first video fields or frames representing the optical image at a first exposure level and a plurality of second video fields or frames representing the optical image at a second exposure level different from the first exposure level, with the first field or frames being interspersed among said second fields or frames, and (2) utilizing that video signal to (a) generate a video display of the image represented by said first video fields or frames or the image represented by said second video fields or frames, or (b) concurrently generate a first video display of the image represented by said first video fields or frames and a second video display of the image represented by said second video fields or frames. In addition to, or instead of, using the video signal output to generate a video display in real time, the invention provides for recording the video signal output of the camera, and subsequently using the recorded video signal to generate video displays of the optical image represented by said first or second fields or frames consisting of the optical image data represented by said first or second video fields or frames.